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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/714,554 | 11/17/2000 | Kunihiro Nunomura | ASA-947 | 5483 |

24956 7590 10/03/2003

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| EXAMINER |
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KAPADIA, VARSHA A

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| ART UNIT | PAPER NUMBER |
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2651

DATE MAILED: 10/03/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,554

Applicant(s)

NUNOMURA ET AL.

Examiner

Regina N. Holder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Haines et al (6,496,313).

Regarding claim 1, Haines et al teaches a method for managing a disk drive comprising receiving a request from a host system to the disk drive to reproduce data from the disk, reproducing a portion of the data, generating error information indicating the presence or absence of an error for each data unit after reproducing a portion of the data and outputting a portion of the reproduced data, remains of the data, and the error information. See the abstract and figs. 4-5 and their corresponding descriptions.

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Regarding claim 8, Haines teaches the error information is added at the head of or at the end of the reproducing data. See figs. 4-5 and their corresponding description.

3. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Yasumasa (JP 07-320418).

Regarding claim 1, Yasumasa teaches a method for managing a disk drive comprising receiving a request from a host system to the disk drive to reproduce data from the disk, reproducing a portion of the data, generating error information indicating the presence or absence of an error for each data unit after reproducing a portion of the data and outputting a portion of the reproduced data, remains of the data, and the error information. See the constitution.

Regarding claim 8, the examiner is interpreting the error information is also simultaneously outputted with the data as being added to the end or head of the data.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haines et al in view of Gray (5,898,534).

Regarding claim 4, Haines et al teaches a magnetic disk drive (300) comprising a magnetic disk recorder (head 306 and the disc), first connection interface connecting a host system (304) with the disk drive, a control unit (302), second connection interface (316) connecting the control unit with the magnetic disk recorder, first function of reproducing a

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plurality of data units according the request, second function of generating error information in first function, which indicates the presence or absence of an error for each data unit and third function of outputting a portion of the reproduced data, remains of the data, and error information. However, Haines et al does not specifically recite outputting the data and error information in a serial manner.

Gray teaches outputting information in a serial manner. See fig. 1.

It would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the teachings of Haines to include the teachings of Gray, motivation being to reproduce the original data without unwanted noise or distortion as set forth in col. 3 lines 49-60.

Regarding claim 10, Haines teaches the error information is added at the head of or at the end of the reproducing data. See figs. 4-5 and their corresponding description.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haines et al in view of Sassa (6,098,077). The teachings of Haines et al are described above with reference to claim 1. However, Haines et al does not teach the error information is a bit map.

Regarding claim 9, Sassa teaches the error information is a bit map. See col. 10 lines 7-13.

It would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the teachings of Haines et al to include the teachings of Sassa, motivation being to provide data management which is tough against destruction and to enable high speed processing of data as set forth in col. 2 lines 61-65.

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7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haines et al in view of Gray as applied to claim 4 above, and further in view of Sassa. The teachings of Haines et al and Gray are described above with reference to claim 4. However, the references do not teach the error information is a bit map.

Regarding claim 9, Sassa teaches the error information is a bit map. See col. 10 lines 7-13.

It would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the teachings of Haines et al and Gray to include the teachings of Sassa, motivation being to provide data management which is tough against destruction and to enable high speed processing of data as set forth in col. 2 lines 61-65.

Response to Arguments

8. Applicant's arguments filed 9/16/03 have been fully considered but they are not persuasive.

Regarding Applicant's arguments that Haines et al is not prior art, the examiner respectfully disagrees. The 102(e) date of Haines et al is the date of the provisional application no. 60/140,861 filed on June 24, 1999. This date is before Applicant's filing date of 11/17/00 and Applicant's foreign priority date of 5/22/00. Furthermore, the filing date of Haines et al (June 23, 2000) is also sufficient for this reference to be used as a 102(e) reference because Applicant has not filed a translation of the foreign priority reference in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding Applicant's arguments that both Haines and Yasumasa report error information in parallel while the present invention informs the host of the reproduction in a serial

manner, Applicant has not claimed this in claim 1. The claimed limitations do not specifically recite or suggest reporting error information in a serial manner.

9. Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

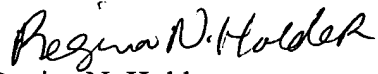
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina N. Holder whose telephone number is (703) 308-4078. The examiner can normally be reached on 6:30 a.m. - 5:00 p.m. Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


Regina N. Holder
Primary Examiner
Art Unit 2651

rnh